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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-----------------------|-----------------------|---------------------|------------------|
| 10/826,979 | 04/16/2004 | Joseph Dominic Domine | 2003B050A | 2215 |
| ExxonMobil Chemical Company Law Technology | | | EXAMINER | |
| | | | TRAN, THAO T | |
| P.O. Box 2149 Baytown, TX 7 | | | ART UNIT | PAPER NUMBER |
| • | | , | 1711 | |
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| SHORTENED STATUTOR | RY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 01/16/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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|---|--|---|--|--|--|
| | Application No. | Applicant(s) | | | |
| Office Antique Commence | 10/826,979 | DOMINE, JOSEPH DOMINIC | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Thao T. Tran | 1711 . | | | |
| The MAILING DATE of this communication ap Period for Reply | pears on the cover sheet with th | e correspondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING Description of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICAT 136(a). In no event, however, may a reply b will apply and will expire SIX (6) MONTHS for the, cause the application to become ABANDO | ION. e timely filed rom the mailing date of this communication. DNED (35 U.S.C. § 133). | | | |
| Status · | | | | | |
| 1) Responsive to communication(s) filed on 16 (| October 2006 and 18 August 20 | 006. | | | |
| <u> </u> | | | | | |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under | Ex parte Quayle, 1935 C.D. 11, | , 453 O.G. 213. | | | |
| Disposition of Claims | | | | | |
| 4) ☐ Claim(s) 2-14,28-33,40-42,44-56,70-88,171-1 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 2-14,28-33,40-42,44-56,70-88,171-1 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o | awn from consideration. 184 and 198-203 is/are rejected | | | | |
| Application Papers | • | | | | |
| 9) The specification is objected to by the Examin | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct | • | | | | |
| 11) The oath or declaration is objected to by the E | | • | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documen 2. Certified copies of the priority documen 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list | ts have been received. ts have been received in Applic prity documents have been rece au (PCT Rule 17.2(a)). | eation No eived in this National Stage | | | |
| • | | | | | |
| Attachment(s) | | | | | |
| Notice of References Cited (PTO-892) | 4) Interview Summ | ary (PTO-413) | | | |
| 2) D Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mai | Date | | | |
| B) Month Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 8/18/06. | 5) Notice of Informa 6) Other: | в г асел Аррисацоп | | | |

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DETAILED ACTION

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Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/16/2006 has been entered.
- 2. Claims 2-14, 28-33, 40-42, 44-56, 70-88, 171-184, 198-203 are currently pending in this application. Claims 1, 15-27, 34-39, 43, 57-69, 89-170, 185-197, and 205-208 have been canceled.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 2-14, 28-33, 40-42, 44-56, 70-88, 171-184, 198-203 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-25, 47-60 of copending Application No. 10/469,072. Although the conflicting

claims are not identical, they are not patentably distinct from each other because the scope of the claims of the copending application overlaps that of the instant claims, rendering them obvious over each other.

The claims of the copending application recite all of the limitations as recited in the instant claims 1, 43, 88, and 170. However, claims 1, 9, 17, and 40 of the copending application recite the laminate to be shaped, whereas the instant claims recite the laminate to be coextruded. Thus, the claims of the copending application read on the instant claims, rendering them obvious over each other.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claims 2-14, 28-33, 40-42, 44-56, 70-88, 171-184, 198-203 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-42, 64-81 of copending Application No. 10/472,871. Although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of the claims of the copending application is narrower than that of the instant claims, rendering them obvious over each other.

The claims of the copending application recite all of the limitations as recited in the instant claims 1, 43, 88, and 170. Furthermore, claims 1, 14, 27, and 64 of the copending application disclose the tie layer comprising one or more layers of material selected from acid polymers, soft ionomers, thermoplastics, or blends thereof. Thus, the scope of the claims of the copending application is narrower than that of the instant claims, rendering them obvious over each other.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

- 6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 7. Claims 4, 28-33, 56, 70-88, 175, 182-184, 198-203 are rejected under 35 U.S.C. 102(b) as being anticipated by Domine et al. (WO 02/078953). The reference is cited in the IDS filed 4/16/2004.

Domine discloses a coextruded laminate structure, comprising at least one layer of an ionomers resin, a tie layer, a backing layer, and a substrate (see abstract; page 5, last paragraph; Figs. 3-4). The tie layer comprises alpha-olefinic polymers and an acid polymer, such as methyl acrylic (see page 14, 2nd paragraph; page 15, last paragraph).

Claim Rejections - 35 USC § 103

- 8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 9. Claims 2-3, 5-14, 40-42, 44-55, 171-174, 176-181 are rejected under 35 U.S.C. 103(a) as being unpatentable over Domine as applied to claims 2 and 44 above, and further in view of Iovine et al. (US Pat. 4,948,822).

Domine is as set forth in claims 2 and 44 above and incorporated herein.

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Domine discloses the tie layer comprising alpha-olefinic polymers and an acid polymer, such as methyl acrylic (see page 14, 2nd paragraph; page 15, last paragraph). However, the reference does not teach the polymer including an amine-containing monomer or an epoxycontaining monomer.

Iovine discloses a laminating adhesive, comprising an acrylic acid alkyl or hydroxyalkul ester monomer, glycidyl methacrylate, or an amine-containing copolymerizable comonomer (see paragraph crossing col. 2 & 3). Iovine further teaches that the adhesive exhibits bond strength, and increased water and humidity resistance (see col. 2, ln. 16-19).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the adhesive comprising a copolymer of an acrylic acid and glycidyl methacrylate or an amine-containing comonomer, as taught by Iovine, in the laminate of Domine, for the purpose of enhancing bond strength, and water and humidity resistance. It has also been within the skill in the art that glycidyl (meth)acrylate and amines are conventional hardeners commonly used in the art. Thus, copolymer having glycidyl and/or amine units would also have higher abrasion resistance.

10. Claims 5-13, 28-33, 47-56, 175-183, 198-203 are rejected under 35 U.S.C. 103(a) as being unpatentable over Domine as applied to claims 2 and 44 above, and further in view of Kojima et al. (US Pat. 4,654,255).

Domine is as set forth in claims 2 and 44 above and incorporated herein.

Domine discloses the tie layer comprising alpha-olefinic polymers and an acid polymer, such as methyl acrylic (see page 14, 2nd paragraph; page 15, last paragraph). However, the reference does not teach the polymer including an epoxy-containing monomer.

Kojima discloses an adhesive resin for improving interlaminar bond between layers in laminates, the adhesive comprising an epoxy-containing olefin polymer; wherein the epoxy-containing monomers are the same as recited in the instant claims such as glycidyl acrylate (see abstract; col. 2, ln. 34-45; col. 3, ln. 28-59). Kojima further teaches the adhesive comprising a diacid, such as maleic acid (see col. 2, ln. 46-60).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the adhesive comprising a copolymer of an olefin and glycidyl methacrylate, as taught by Kojima, in the adhesive of Domine, for the purpose of enhancing interlaminar bond strength between layers in laminates.

Response to Arguments

11. Applicant's arguments filed on 8/18/2006 have been fully considered but they are not persuasive.

The rejections of the claims under obviousness-type double patenting are maintained and will be withdrawn upon receipt of the Terminal Disclaimers.

The rejection of the claims as anticipated by Domine WO '953 is maintained because the reference does teach a tie layer comprising olefinic polymers and methyl acrylic polymer, which read on the presently claimed invention.

12. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning in the combination of Domine and Iovine, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within

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the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In this case, Iovine is used to illustrate that a laminating adhesive containing a polymer of an amine-containing or epoxycontaining monomer has been taught in the prior art to improve bond strength and water and humidity resistance. Thus, Iovine is used to remedy Domine.

13. With respect to Applicants' argument that the emulsions of Iovine are not extrudable and cannot be extruded with the polymers of Domine, it is noted that since the adhesive of Iovine contains the same composition as presently claimed, it would inherently have the same properties, i.e. extrudable.

The same arguments are presented with respect to the combination of Domine and Kojima.

Contact Information

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thao T. Tran
Primary Examiner
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